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EXAMINER

WITCZAK, CATHERINE

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3767

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/016,128  
Filing Date: December 17, 2001  
Appellant(s): FARIES, ET AL.

\_\_\_\_\_  
Stuart B. Shapiro  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 7/16/2008 appealing from the Office action mailed 10/18/2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

<b>2001/009610</b>	<b>AUGUSTINE et al</b>	<b>7-2001</b>
<b>6,788,885</b>	<b>MITSUMAGA et al</b>	<b>9-2004</b>
<b>4,747,450</b>	<b>IKEGAME et al</b>	<b>5-1988</b>

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 17, 51, and 57 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims include the limitation “enabling said intravenous fluid warming device to heat said fluid to said desired temperature within said range of 60°F - 160°F.”

2. Claim 17-23 and 51-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Augustine et al (US 2001/0009610) as modified by Mitsunaga et al (US 6,788,885) in further view of Ikegame et al (US 4,747,450).

Augustine et al. disclose in Figure 1 a fluid cassette comprising a fluid line tubing including an inlet (146) and an outlet (148) including connectors, a temperature sensor (paragraph 0030), and a conductive contact disposed about a portion of said fluid flow means to indicate the presence of a cassette within the warming device (paragraph 0027). Augustine et al disclose the claimed invention except for the quantity of tubing section providing a residence time enabling warming of the fluid to a desired temperature with the range of 60–160 °F. Mitsunaga et al teach in columns 1, lines 23-25 and column 6, lines 39-43) that it

is known to vary the length of tubing to achieve warming to a desired temperature range. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Augustine et al with varied tubing length to provide for warming of liquid in the tubing to a desired temperature, since such a modification would allow the device to provide sufficiently heated blood when treating patients.

Augustine et al in view of Mitsunaga et al disclose the claimed invention except for the fluid line tubing including a spiral section wherein the fluid flow direction within each tubing section is opposite the fluid flow direction with each adjacent tubing section. Ikegame et al teach in column 4, lines 19-24 that it is known to use a spiral design with reserved fluid flow in adjacent tubing section. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Augustine et al in view of Mitsunaga et al, since such a modification would allow for even temperature distribution without the creation of thermal stress.

#### **(10) Response to Arguments**

1. In response to Appellant's arguments regarding the 112<sup>th</sup> first paragraph rejection of the specification, it is the Examiner's position that the limitation as presented in the claims: "desired temperature *within* the range of 60 –160 °F" is not the same as the limitation which was originally filed in the specification: "temperatures in the *approximate* range of 60 –160 °F." To prove her point, Examiner provides as an example a situation in which the prior art discloses heating fluid to a temperature to 59°F. In this situation, the reference could be used in a U.S.C. 102 rejection, assuming the limitation "temperatures in the *approximate* range of 60 –160 °F" were claimed; whereas the reference would only be applicable in a U.S.C. 103 rejection assuming the limitation "temperature *within* the range of 60 –160 °F" were claimed.

2. Appellant argues that it would not be obvious to combine the Augustine et al reference with the Mitsunaga et al reference, stating on page 16, lines 18-21 of the Appeal Brief that "in fact, the Augustine et al publication discloses various manners of controlling the rate of warming of IV fluid, none of which concern a quantity of section of the cassette providing a residence time for the warming device to heat the fluid to a desired temperature as recited in the claims." It is the Examiner's position that Appellant's own argument provides reasoning for why it would be obvious to combine the teaching of Augustine et al with Mitsunaga et al. As Appellant points out, Augustine et al disclose various manners of controlling the rate of warming of IV fluid. Thus, since Augustine et al does not teach the criticality of one particular mode of warming IV fluid, and Mitsunaga et al teach that it is known to use the method of varying tubing length to provide a residence time for warming fluid to a desired temperature, it would be obvious to one having ordinary skill in the art at the time the invention was made to use the Mitsunaga et al teaching of warming fluid as one of the various manners of controlling the rate of warming of IV fluid in the Augustine et al device. In response to Appellant's argument that the combination of Mitsunaga et al in the teaching of Augustine would cause improper operation of the cassette in the warming unit, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to Appellant's argument that there is no suggestion to combine the references of Augustine, Mitsunaga and Ikegame, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

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USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Examiner points out that all three references are related to each other, as all deal with the problem of heating. As M.P.E.P. 604.01(c) states "a tea mixer and a concrete mixer may both be regarded as relating to the mixing art, this being the necessary function of each. Similarly a crick-cutting machine and a biscuit cutting machine may be considered as having the same necessary function." Thus, the fact that the Ikegame reference is drawn to a device for cooling semiconductors, it nonetheless deals with the art of heating/cooling, and thus is relevant in the teachings of Augustine and Mitsunaga.

In response to Appellant's arguments that the Augustine reference does not disclose a "conductive contact disposed *about* a portion of the fluid line tubing," Examiner points to Figure 2 of the Augustine reference. Cassette presence circuit (126) is located on the heater plate assembly (120), into which cassette (104) is inserted. Thus, when the cassette (including the fluid line tubing) is inserted into the heater plate assembly, the presence circuit (126) is disposed about (i.e. surrounding) the cassette fluid tubing.

Finally, in response to Appellant's argument that the Augustine reference does not disclose a "thermally conductive member disposed within a fitting in direct contact with fluid flowing in the fitting, and receiving the temperature sensor to measure temperature of the fluid," Examiner once again points Appellant to paragraph [0030] where Augustine et al disclose "the fluid outlet port 148 also may have an infrared thermometer, integral heat sensor, or thermocouple for sensing fluid temperature. Other heat sensor or thermocouples may be placed at other location in the system such as at the inlet port 146 or may be strategically located inside the fluid pathway 144."

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Catherine N Witzak/

Examiner, Art Unit 3767

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